CLAIMS

[1] (Amended) A catalyst composition for purifying an exhaust gas containing an organic compound and a silicon compound,

the catalyst composition containing alumina particles having a precious metal carried thereon, and zeolite particles, and

a proportion of a weight of the zeolite particles relative to a sum of a weight of the alumina particles and the weight of the zeolite particles being in a range of 1 wt.% to 70 wt.%.

[2] The catalyst composition according to claim 1, wherein the silicon compound is an organosilicon compound.

[3] The catalyst composition according to claim 1, wherein the silicon compound is an organic silicone.

[4] (Deleted)

[5] (Amended) The catalyst composition according to any one of claims 1 to 3, further containing a binder.

[6] The catalyst composition according to any one of claims 1 to 5, wherein the zeolite particles are zeolite particles having a precious metal carried thereon.

[7] The catalyst composition according to any one of claims 1 to 6, wherein the precious metal is Pt, Pd, Rh, Ir or Ru, an alloy of any of these, or a mixture of these.

[8] The catalyst composition according to any one of claims 1 to 7, wherein an amount of acid of zeolite is in a range of 0.4 to 1.5 mmol NH_3/g.

[9] The catalyst composition according to any one of claims 1 to 8, wherein a sum of an amount of an oxide converted from an alkali metal contained in the zeolite, and an amount of an oxide converted from an alkaline earth metal contained in the zeolite is 5 wt.% or less based on a total amount of the zeolite.

[10] A catalyst comprising:

a catalyst substrate; and

a catalyst layer formed on the catalyst substrate and containing the catalyst composition according to any one of claims 1 to 9.

[11] The catalyst according to claim 10, wherein an average thickness of the catalyst layer is in a range of 10 to 500 μm.

[12] An exhaust gas purification method comprising the step of:

bringing an exhaust gas containing an organic compound and a silicon compound into contact with the catalyst according to claim 10 or 11 at a temperature of 200 to 500°C for reaction thereof.

[13] A method for producing a catalyst for purifying an exhaust gas containing an organic compound and a silicon compound, comprising the steps of:

preparing a slurry containing alumina particles having a precious metal carried thereon and zeolite particles; and

coating the slurry onto a substrate, followed by drying.